Assessment Service Excellence in Elderly at the Gamping Health Center, Sleman Regency, Special Region of Yogyakarta

Authors:
Rochana Ruliyandari, Fatma Nuraisyah, Solikhah Solikhah

Affiliations:
Faculty of Public Health, Universitas Ahmad Dahlan, Yogyakarta 55164, Indonesia

Corresponding author:
Rochana Ruliyandari, M.kes,
Faculty of Public Health
Universitas Ahmad Dahlan, Yogyakarta, Indonesia 55164, Indonesia
Jl. Prof. Soepomo, Janturan, Warungboto, Yogyakarta, Indonesia
*Tel. (+62) (0274) **371120 ,379418 ,511830 ,563515** Fax: (+62) (0274) 564604*
E-mail: rochana.ruliyandari@ikm.uad.ac.id

Abstract

Background

Health center was become a health reference place. As the first reference for public health, especially the elderly, health center must be able to provide services and facilities needed by the elderly according to their health and physical conditions. Improving health geriatric services were very important to help parents who are at risk of seeking medical care for their illness. This study aimed to comprehensively investigated the knowledge of Indonesian geriatric health services regarding geriatric risk factors, barriers, attitudes, and facilities of puskesmas in accordance with the elderly's polite program.

Method

This observation study based on the elderly corrected the services and facilities of the health center. The sample was chosen in the criteria of parents around Sleman limestone by stratified random sampling. The ordinal logistic model was used to investigate the effects of grouping characteristics of participants in this study.

Results

services and facilities were only according to the standard set, there was an effort to raise the degree of the health center to be one standard number above according to the criteria. It was seen that there were at least elderly people who visited the health center. However, the elderly who attended the health center were significantly associated with better attitudes and healthy behaviors related to various elderly factors. The elderly with a higher

education level had a 30% worse attitude. Family support for the elderly was needed.

Conclusion

Elderly patients had a minimum level of knowledge about health risk factors and a lack of family support will worsen the quality of life for the elderly. The results of this study may reflect a policy of awareness on improving services and facilities at the health center. Lack of program promotion and family support reduces the awareness of the elderly to check their health. This finding indicated that the services and conditions of Gamping 1 and 2 Health Center facilities need to be improved, as expected and needed by the elderly.

Keywords: ederly, health center, service, facility.

Key Messages

Implication for policy makers

This research will provide great benefits to elderly health care providers, for the Indonesian government, especially the Sleman District Health Office in the Special Region of Yogyakarta (DIY). This is expected to help to improve services, elderly health facilities, and the effectiveness of elderly polite programs at the Gamping Health Center. Therefore, this program can facilitate the government to intervene in order to improve services and facilities for the elderly.

Background

Elderly health is in the sharp spotlight of the world because the proportion of the elderly population in the world between 2015 and 2050 will increase almost twice from 12% to 22%. The World Health Organization (WHO) considers that this will have a negative impact on society if the old age is dominated by a decrease in physical and mental capacity.[1] As age increases and the proportion of elderly people in most industrialized and developing countries, the main question is whether this aging population will be accompanied by sustainable or better health, improved quality of life and adequate social, and economic resources.[2] Policy makers need to anticipate this trend and prepare a health care system to function as efficiently as possible to service all elderly citizens with appropriate and affordable care.[3]

The number of elderly growth in Indonesia in 2000 reached 7.18%, from a population of 14.4 millions.[4] Then in 2020 it is estimated that the number of elderly people in Indonesia had increased to 11.34% of the total population of 28.8 millions.[5] Three provinces with the largest percentage of elderly are DIY (13.81%), Central Java (12.59) and East Java (12.25%). Meanwhile, three provinces with the smallest percentage of elderly were Papua (3.20%), West Papua (4.33%), and Riau Islands (4.35%).[6]

The Indonesian government's national action plan has been contained in the national strategy plan in the National Elderly Health Action Plan (RANKLU) which states that in the context of health development plans towards Healthy Indonesia 2010. RANKLU's vision is to improve elderly health status, increase life expectancy with old age healthy, independent, active, productive, efficient for the family and society, have access to the desired health services, as well as handling complications related to old age.(7) The Law of the Republic of Indonesia Number 36 of 2009 states that health is a healthy condition physical, mental, spiritual and social which allows everyone to live productively socially and economically.(8)

Aging is an inevitable process, usually measured by chronological age and as a convention. Someone who is 65 years old or more commonly referred to as' the elderly.(9) The countries in Asia will experience the largest increase in 2050. One in four Asians will be over 60 years of age.(10) 10 Women's life expectancy is higher than men men, namely 9.53% and 8.54%.(6) The problem of old age is not limited to developing countries. Even in the richest countries, the elderly must face poor health and the fact that they may not be physically independent.(10) A strong primary care system is associated with reduced morbidity, increased patient age, and increased equity in health outcomes in some countries.(11)

The standard and quality system and procedures for elderly services in the Yogyakarta Health center still need to be improved (for example, the length of time to wait for services to be hospitalized between 60-119 minutes is the highest, 25%, while the national figure is 5.7%. it is necessary to conduct a facility based geriatric review in hospitals, health centers and other referral facilities including clinics in Yogyakarta.The results will be used to improve the quality of elderly health services in referral facilities and improve the performance of health workers, especially nurses and medical personnel in management. health care cases for the elderly This study aims to determine the implementation of the elderly polite program which includes facilities and services at Gamping 1 and Gamping 2 Health Center. Gamping Health Center was chosen as a sample because in the framework of screening the effectiveness of providing excellent service to the elderly and it is in accordance with the program and detection of the needs of the elderly in health services in Sleman Regency.

Method

This study is an analytic observational study with cross-sectional design. The instrument used was a check list of elderly services and a check list of service support facilities for the elderly, with respondents being elderly patients at Gamping 1 and Gamping 2 Health Center. The population in this study was elderly in Gamping District Sleman Regency, Indonesia, aged ≥60 years who can still communicate well. The sample size in this study based on

multivariate analysis that will be used in analyzing the level of needs of the elderly. The number of samples of two health center in Gamping 1 and Gamping 2 were multiplied by 75 observations per independent variable,[12] so that the sample size used in this study was 150 elderly. The sampling technique for this study was the stratification of elderly visitors to the Gamping 1 and Gamping 2 Health Center in Sleman, Yogyakarta. Eligible samples were taken randomly around the Gamping Health Center.

Inclusion criteria consisted of: 1) Elderly aged ≥60 years are based on living around Gamping 1 and Gamping 2 Health Center, Sleman Regency, Yogyakarta; 2) Elderly who are literate; 3) Willing to participate in this research. Exclusion criteria consist of: 1) Elderly who previously visited Gamping Health Center; 2) Elderly who are having their health checked at the Gamping Health Center; 3) Elderly who live around the Gamping Health Center. This study used univariate statistical analysis which aimed to determine the community distribution of the elderly, the diagnosis status of chronic diseases, the participation of the elderly in "BPJS Prolanis", facilities of health center, and employment status of the elderly. The next analysis was bivariate statistical analysis which is used to determine the relationship between variables.

Results

The minimum service standard (SPM) in the health sector is a reference for district/city governments in providing health services that are entitled to be obtained by each citizen minimally. SPM has at least two functions, namely: 1) Facilitating local governments to carry out public services that are appropriate for the community; and 2) As an instrument for the community in exercising control over government performance in the field of public service in the health sector.[13]

Table 1. Facilities and Program Criteria for Community Health Center "Santun Lansia"

Facility	Standard Health Center Strata I	Gamping II	Standard Health Center Strata III	Gamping I
Physical	1. Entrance Path 2. Bathroom (water closed squatting) 3. Nameplate of "Affordable Elderly" Puskesmas 4. Information board "Prioritizing Elderly Services""	1. Entrance Path 2. Bathroom (water closed squatting) 3. Nameplate of "Affordable Elderly" Puskesmas 4. Information board "Prioritizing Elderly Services""	1. Entrance Path 2. There is a Handrail (entrance, registration, lab check) 3. Bathroom (water closed sitting) there is a handle 4. Nameplate of "Affordable Elderly" Puskesmas 5. Information board "Prioritizing Elderly Services" 6. There is a service flow for the elderly 7. Special Services Health counseling is available	1. Entrance Path 2. There is a Handrail (entrance, registration, lab check) 3. Bathroom (water closed sitting) there is a handle 4. Nameplate of "Affordable Elderly" Puskesmas 5. Information board "Prioritizing Elderly Services" 6. There is a service flow for the elderly 7. Special Services Health counseling is available
Equipment	1. Wheelchairs, Elderly Kits, Tripot, Reading	1. Wheelchairs, Elderly Kits, Tripot, Reading	1. Wheelchairs, Elderly Kits, Tripot, Reading books/Leaflets	1. Wheelchairs, Elderly Kits, Tripot, Reading books/Leaflets

	books/Leaflets	books/Leaflets	2. Loudspeaker	2. Loudspeaker
	2. Loud speaker	2. Loud speaker	3. "KMS"	3. "KMS"
	3. "KMS"	3. "KMS"		
Health workers	1. Doctor, Medicinal (general, laboratory, Nutrition Officer)	1. Doctor, Medicinal (general, laboratory, Nutrition Officer)	1. Doctor, Medicinal (general, laboratory, Nutrition Officer) 2. Pharmacy 3. Nutritionist 4. Physiotherapist 5. psychologist 6. Laboratory	1. Doctor, Medicinal (general, laboratory, Nutrition Officer) 2. Pharmacy 3. Nutritionist 4. Physiotherapist 5. psychologist 6. Laboratory
	2. Pharmacy	2. Pharmacy		
Administration	1. Separate registration	1. Separate registration	1. Separate registration	1. Separate registration
	2. Elderly status is the same as other statuses	2. Elderly status is the same as other statuses	2. Elderly status is the same as other statuses	2. Elderly status is the same as other statuses
	3. There is no reduction in costs	3. There is no reduction in costs	3. There is a reduction in costs for ages ≥70 years	3. There is a reduction in costs for ages ≥70 years

Facilities	1. Payment Counter becomes One 2. Elderly has not been prioritized (6 working days: 2 working days for older people, 4 days with the public) 3. Comfortable lounge 4. Own old recipes 5. Visits to elderly groups once a year	1. Payment Counter becomes One 2. Elderly has not been prioritized (6 working days: 2 working days for older people, 4 days with the public) 3. Comfortable lounge 4. Own old recipes 5. Visits to elderly groups once a year	1. Payment counters become one with differentiated numbers 2. Prioritize the Elderly 3. Pelayana 6 working days (distribution: 5 working days for precedents, 1 day with the public) 4. Comfortable lounge 5. Special recipes for the elderly and take precedence 6. Visits to elderly groups 2 times a year	1. Payment counters become one with differentiated numbers 2. Prioritize the Elderly 3. Service for 6 working days for the elderly takes precedence 4. Comfortable lounge 5. Own old recipes and precedence 6. Visits to groups of elderly at least 2 times a year
Partnership	Every 6 months	Every 6 months	Every 2 months	Every 2 months

As a strata III health center, Gamping 1 Health Center has met the standards of strata III health center in terms of physical facilities, equipment, health personnel, administration, facilities, and partnerships. Likewise, the Gamping 2 Community Health Center has met the standard strata I health center.

Table 2. Distribution of the Number of Elderly Community, Diagnosis Status of Chronic Diseases, Use of "BPJS", Health Center Facilities, and Employment Status of the Elderly

Variable	Total (n)	Percentage (%)
Elderly Community		
Yes	2	1.32
No	149	98.68
Diagnosis Status of Chronic Diseases		
1	71	46.71
2	81	53.29
"BPJS" for Elderly		
Yes	4	2.63
No	148	97.37
Health Center Facilities		
Yes	95	62.50
No	57	37.50
Employment Status		
Farmer	7	4.61
Trader	37	24.34
Labor	17	11.18
Retired Civil Servants/Officials	12	7.89
Does not work	27	17.76
Others	52	34.21

The average age of respondents is 65 years. In Indonesia, the limit on elderly is 60 years and over, in Law Number 13 of 1998 concerning elderly welfare in Chapter 1 paragraph 2. Services and facilities at Gamping Health Center have consumers from various groups. Based on the results of the study there were as many as 24.34% of traders, namely 37 people out of the total sample, 17 people (11.18%) had labor jobs, and 12 of the total respondents were retirees, respondents who worked but not farmers, retirees, traders or laborers are 52 people (34.21%), from the data analyzed 17.76% of them did not have jobs or a total of 27 people out of the total number of respondents. In Gamping 1 and 2 Health Center, out of the total number of elderly respondents participating in "BPJS", they did not participate in "BPJS Prolanis" with four people, elderly who participated in "BPJS Prolanis" were 148, on health status with a history of 81 people. This is the challenge of leadership in health center as managers of health services capable of attracting people to visit health center even though they are not in a sick condition. This is done to make the elderly community have a greater responsibility in creating health support for development and the health center is able to have a greater bargaining position in relation to other parties outside to participate in improving the quality of life for the elderly.

Table 3. Distribution by Work Program Area with Gamping 1 and Gamping 2 Health Canter Facilities

Variable	Health Center Facilities		Total (n)	P-Value	PR
Work Program Area	**Yes**	**No**			
Gamping I	76 (47.5%)	0 (28.5%)	76	0.00	0.8
Gamping II	19 (47.5%)	57(28.5%)	76		
Total	**95**	**57**	**152**		

Community characteristics in each working area of Gamping 1 and Gamping 2 Health Center are related to the presence of facilities in each health center, as shown by the results of bivariate analysis which were statistically significant (p-value=0.00). Facilities at Gamping 2 Health Center have strata I facilities so that users are lower than Gamping 1.

Table 4. Distribution Based on the Number of Patients with Chronic Diseases with Gamping 1 and Gamping 2 Health Center Facilities

Variable	Health Center Facilities		Total (n)	P-Value	PR
Chronic Diseases	**Yes**	**No**			
Yes	41 (44.4%)	30 (26.6%)	71	0.25	-0.09
No	54 (50.6%)	27 (30.4%)	81		
Total	**95**	**57**	**152**		

Of the total 152 respondents elderly, 71 people suffering from chronic diseases, a total of 41 (44.4%) agree with the facilities of health centers and 30 people (26.6%) disagree. Furthermore, a total of 81 respondents did not have a chronic disease consisting of 54 people (50.6%) who said they agreed with the facilities at the health center, and 27 people (30.4%) thought they did not agree. Chronic disease variables with health center facilities do not indicate a relationship, indicated by the results of statistical analysis (p-value=0.25).

Table 5. Service Satisfaction with Gamping 1 and Gamping 2 Health Center Facilities

Variable	Health Center Facilities		Total (n)	P-Value	PR
Service Satisfaction	**Yes**	**No**			
Yes	92 (65.2%)	49 (34.8%)	141	0.02	0.11
No	3 (27.3%)	8 (4.1%)	11		
Total	**95**	**57**	**152**		

Of a total of 152 elderly respondents, 92 people (65.2%) were satisfied with the availability of facilities at the health center, while 3 people (27.3%) were dissatisfied with the availability of facilities at the health center. The service satisfaction felt by the elderly in the working area of Gamping 1 Health Center and Gamping 2 Health Center was related to the availability of facilities in both health center, according to the results of the bivariate analysis which was statistically significant (p-value=0.02)

Discussion

Elderly is one of the most vulnerable groups and is at high risk for deteriorating health and evaluation of the profile of morbidity will have implications for medical costs and provision of health care for them. Various types of predictors of mortality and morbidity have been classified into three categories, namely, socio-economic or demographic factors which include age, sex, education, occupation, ethnicity and marital status; behavioral risk factors such as smoking status, alcohol intake, dietary habits and physical activity; and health parameters such as blood pressure, blood sugar levels, obesity, cholesterol levels and physical abilities.[14] The use of health services and the need for support services is increasing among older adults.[15]

For more than three decades, WHO has encouraged countries around the world to strengthen their health care systems through the values and principles of health care led by primary care.[16] Primary care offers access to care for all subgroups of the population at a lower cost than specialist secondary care.[17] The assessment of elderly health services and facilities is needed to re-explore, trace physical evidence and look for evidence to the public whether services and facilities at Gamping 1 and Gamping 2 Puskesmas have taken into account the needs of the elderly. The perceptions of the elderly's well-mannered programs applied at the puskesmas show that the health centers in Sleman Regency have provided many facilities and infrastructure with strata criteria.[18] This criterion is intended as the launching of a program that must be owned by the puskesmas so that the elderly can

comfortably visit the elderly public health center throughout the Sleman Regency. This program is a government policy to facilitate its citizens to get comfortably if they are examined in health at a health center. At present the Gamping 1 and Gamping 2 Health Center each have, although there are still health center in the Sleman Regency area that implement the elderly strata I polite program.

In accordance with the authority for the regional government in regulating and organizing, managing the affairs of the government and the interests of the people themselves.[19] Referring to this matter, Sleman Regency in its government policy that Sleman Regency is in line with the policy of the Ministry of Health of the Republic of Indonesia to improve the health status of qualified elderly people. Through the provision of friendly health care facilities for the elderly, it is expected that the elderly can come to the first health service joyfully with the support of family and community. In addition, with the existence of public health facilities, the elderly will minimize the increasing weight of the incidence of degenerative diseases and non-communicable diseases that are usually experienced by the elderly.[4] Older adults often have several chronic conditions and subsequently higher health care needs and costs.[20]

With the epidemiological transition, chronic disease causes 63% of all deaths worldwide.[21] Chronic disease patients need follow-up care in the long term, collaborating with experts across programs[22] that is, doctors and health care professionals still play a leading role.[23] The main disadvantage in the typical outpatient and inpatient delivery systems is that primary care professionals, paramedics, emergency doctors, and hospital functions are not integrated which hinders care coordination, inhibits communication, compromises quality, and increases costs. Other modifiable barriers to accessing lead without exception for unmet health needs, delays in receiving appropriate care, and preventable hospitalization.[24] The results of this study indicated that the majority of respondents, namely 95 elderly, consisting of elderly who have chronic or not, agree with the existence of elderly facilities in the puskesmas, although there is no statistical relationship to the variables of chronic diseases and health center facilities.

Higher patient satisfaction levels indicate a higher level of patient empowerment, commitment to care and compliance with recommended management all produce better health outcomes.[25] The most recent systematic review found that provider competence, interpersonal skills and facility characteristics (eg: physical environment, type, and facility level) were positively related to patient satisfaction.[26] Based on the findings in this study, most of the elderly were satisfied with the services provided by elderly facilities available at the puskesmas. This study also found a relationship between service satisfaction and the presence of elderly facilities at the health center.

Conclusion

The nature of the elderly courtesy program at the health center is to provide services to the community, so that it can be said that the main element of the service is the development of community health center facilities. The series of facilities development in the well-mannered health center program for the elderly who have levels as the strata consists of medical and non-medical services. Therefore, this polite program for the elderly is a benchmark for health center to improve their status. Physical assessment, equipment, health personnel, administration, services, and health center partnerships can be done through assessment of the process and results. The findings of the Gamping 1 and Gamping 2 Health Center assessment indicated that the condition of the health center is in accordance with the criteria of the health center in the strata and in accordance with the literature on good health centers. While the assessment findings on the results showed that the service process that has been running has succeeded in changing the level of public awareness and increasing understanding to come to health services, but to achieve the level of independence and the degree of empowerment that further learning still needs to be done continuously and integrated.

The need to socialize the elderly public health center program to be understood by the community at large. The role of regional government is expected to be greater in realizing maximum plenary service for the elderly in all health center. Increasing the quality of the program is strived to be improved on government intervention for funding and program direction. The maximum role of the health center as a health service place that has good and complete facilities to meet the health care needs of the elderly. The well-mannered program of the elderly can be felt by a community of elderly people who often visit to check their health condition to get prime plenary service.

Acknowledgement

This research is funded by the income and expenditure budget of Universitas Ahmad Dahlan 2017/2018 academic year with contract numbers: PUP-005/SP3/LPPM-UAD/VII/2018. Thanks to Fia, Vivi and Atika for helping in data collection.

References

World Health Organization. *Ageing and Health*. February 2018:11–4.

DaVanzo J. *Preparing for an Aging World*. 2018.

Joling KJ, van Eenoo L, Vetrano DL, Smaardijk VR, Declercq A, Onder G, et al. Quality indicators for community care for older people: A systematic review. *PLoS ONE*. 2018;13(1):1–19.

Kementerian Kesehatan Republik Indonesia. *Buletin Jendela Data dan Informasi Kesehatan.* Pusat Data dan Informasi. 2013.

Kementerian Kesehatan Republik Indonesia. *Situasi dan Analisa Lanjut Usia*. Pusat Data dan Informasi. 2014.

Kementerian Kesehatan Republik Indonesia. *Analisis Kesehatan Lansia*. Pusat Data dan Informasi. 2017;1–2.

Kementerian Kesehatan Republik Indonesia. *Peraturan Menteri Kesehatan Republik Indonesia Nomor 25 Tahun 2016 Tentang Rencana Aksi Nasional Kesehatan Lanjut Usia Tahun 2016-2019*. 2016.

Kementerian Kesehatan Republik Indonesia. *Undang-Undang Republik Indonesia Nomor 36 Tahun 2009 Tentang Kesehatan*. 2009.

Orimo H, Ito H, Suzuki T, Araki A, Hosoi T SM. Reviewing the definition of "elderly". *Geriatr Gerontol Int*. 2006;6(3):149–58.

Shetty P. Grey matter: ageing in developing countries. *The Lancet*. 2012;379(9823):1285–7.

Kruk ME, Porignon D, Rockers PC, Van Lerberghe W. The contribution of primary care to health and health systems in low- and middle-income countries: A critical review of major primary care initiatives. *Soc Sci Med*. 2010;70(6):904–11.

Hair, J., Black, W., Babin, B., Anderson, R. and Tatham R. *Multivariate Data Analysis*. 6th ed. Upper Saddle River: Pearson Prentice Hall; 2006.

Kementerian Kesehatan Republik Indonesia. *Peraturan Menteri Kesehatan Republik Indonesia No.43 Tahun 2016 tentang Standar Pelayanan Minimal Bidang Kesehatan*. 2016;79.

Tyagi R, Paltasingh T. Determinants of Health among Senior Citizens. *J Health Manag*. 2017;19(1):132–43.

Tkatch R, Musich S, MacLeod S, Alsgaard K, Hawkins K, Yeh CS. Population Health Management for Older Adults. *Gerontol Geriatr Med*. 2016;2:233372141666787.

World Health Organization. *Primary Health Care: Now More Than Ever The World Health Report 2008*. World Health Rep. 2008;26:148.

Package TPH. *Primary Health Care Key to Delivering Cost-Effective Interventions*.

Ruliyandari R. Implementasi Program "Santun Lansia" Puskesmas Kabupaten Sleman. Kes Mas *J Fak Kesehat Masy*. 2018 Jan 6;12(1):8–14.

Dewan Perwakilan Rakyat Republik Indonesia. *Undang-Undang Republik Indonesia Nomor 23 Tahun 2014 Tentang Pemerintahan Daerah*. 2014;561–5.

Wells TS, Bhattarai GR, Hawkins K, Cheng Y, Ruiz J, Barnowski CA, et al. Care coordination challenges among high-needs, high-costs older adults in a medigap plan. *Prof Case Manag*. 2016;21(6):291–301.

World Health Organization. *World Health Statistics 2012*. 2012.

Pomey MP, Ghadiri DP, Karazivan P, Fernandez N, Clavel N. Patients as partners: A qualitative study of patients' engagement in their health care. *PLoS ONE*. 2015;10(4):1–19.

23. Bauman AE, Fardy HJ, Harris PG. Getting it right: Why bother with patient-centred care? *Med J Aust*. 2003;179(5):253–6.
24. Clarke JL, Bourn S, Skoufalos A, Beck EH, Castillo DJ. An Innovative Approach to Health Care Delivery for Patients with Chronic Conditions. *Popul Health Manag*. 2017;20(1):23–30.
25. Erin DuPree, MD, Rebecca Anderson, MPH, and Ira S. Nash M. Improving Quality in Healthcare: Start With the Patient. *Mt SINAI J Med*. 2011;78:813–819.
26. Batbaatar E, Dorjdagva J, Luvsannyam A, Savino MM AP. Determinants of patients' satisfaction: a systematic review. *Perspect Public Health*. 2016;XX:1–13.